

REMARKS

This paper is in response to the Office Action dated October 21, 2005, in which claims 1-11, 13-16, 20-21, 23, 31, 33, 40-42 and 45 were rejected, and claims 12, 17-19, 22, 24-30, 32, 34-39, 43-44 were objected to. Claims 1-45 remain pending and at issue. Of these, claim 1 is independent. Applicants respectfully request reconsideration and favorable action in this case.

I. Allowable Claims

Applicants thank the examiner for the indication that claims 12, 17-19, 22, 24-30, 32, 34-39, 43-44 are allowable in substance. Applicants respectfully defer the rewriting of these claims in independent form to include all of the limitations of the base claims and any intervening claims, pending the consideration of the arguments below.

II. The Rejections under 35 U.S.C. §102(b) are Traversed

Claims 1, 4, 11, 15, 16, 20 and 31-38 stand rejected under 35 U.S.C. §102(b) as anticipated by Call et al. U.S. Pat. No. 5,892,939 ("Call"). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Claim 1 specifies, in pertinent part, a process control system element having a control module, a graphic display module, and a process simulation module. The control module is adapted to execute on one or more process controllers to implement process control activities, while the graphic display module is adapted to produce a graphical depiction on a user interface. Claim 1 further specifies that the process simulation module is "adapted to simulate the operation of one or more physical devices within the process plant being controlled by the control module and depicted in the graphical depiction associated with the graphic display module, wherein the process simulation module is communicatively connected to the control module to communicate data between the process simulation module and the control module during operation of the control module."

Applicants respectfully submit that, among other recited limitations of claim 1, the foregoing recited features of the process simulation module are neither disclosed nor suggested by Call.

In contrast, Call is directed to the visual display of graphical elements in different user interface environments. As set forth in the Abstract, Call is concerned with the emulation of an environment and, to that end, discloses a number of routines to control a display depicting images relating to a process control system. But the depiction of images via a user interface, as taught by Call, fails to disclose or suggest simulation, much less the simulation of the operation of a physical device.

On the contrary, the emulation environment of Call merely translates the data representation from a native visual representation to a non-native visual representation with no capability for simulation. A non-native display may then be used to depict an image thereon based on a drawing command otherwise used in the native visual representation. Please see, for example, Fig. 3 of Call, and elements 325 and 335 thereof, as well as col. 9, line 64 – col. 11, line 11. In this way, Call teaches a technique to allow different computers to display the same image, where one computer may draw the image in a whole-screen display, and another may draw the image in a windowed display. Please see, for example, col. 10, lines 49-64, as well as col. 9, line 64 – col. 10, line 26.

Applicants respectfully submit that Call's depiction of visual display elements for display on a user interface does not constitute simulation or process plant device operation. It follows that Call does not teach or suggest a process simulation module adapted to simulate the operation of one or more physical devices, as recited in claim 1.

In addition, Claim 1 recites, in part, "a control module adapted to execute on the one or more process controllers to implement process control activities within the process plant". Applicants respectfully submit that the computer module (CM) 180 of Call does not teach or suggest a control module adapted to execute on one or more process controllers. CM 180 of Call is separate from a process controller 120 and communicates with the process controller 120 via NIM 140 or HG 145. Please see, for example, col. 8, lines 36-41. As CM 180 is

explicitly defined as being separate from a process controller, Applicants respectfully submit that CM 180 in no way teaches or suggests “a control module” adapted to execute on a process controller.

For the foregoing reasons, it is respectfully submitted that Call fails to teach or suggest every element of claim 1. It follows that claim 1 and, by implication, claims 2, 3, 11, 13, 15, 16, 23, 31, and 33 dependent thereon, are not anticipated thereby. Applicants therefore respectfully request reconsideration and withdrawal of the rejection of claims 1-3, 11, 13, 15, 16, 23, 31, and 33 under 35 U.S.C. §102(b).

III. The Rejections under 35 U.S.C. §103(a) are Traversed

Claim 4 stands rejected under 35 U.S.C. §103(a) as unpatentable over Call in view of Dessureault et. al. U.S. Patent Pub. No. 2003/0200062 (“Dessureault”). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Dependent claim 4 depends from independent claim 1, discussed above to be patentable over Call. Dessureault fails to cure the above-noted deficiencies of Call in connection with the recitation of claim 1, and thus fails to disclose or suggest every element of claim 1. Dessureault is instead cited in connection with duct type connection elements and is directed to computer drawings rather than the simulation of the operation of a process plant device. Thus, dependent claim 4 is patentable for at least the same reasons as those set forth above in connection with claim 1. Therefore, Applicants respectfully request allowance of dependent Claim 4.

Claims 5, 14 and 45 stand rejected under 35 U.S.C. §103(a) as unpatentable over Call in view of Hitchens et. al. U.S. Pat. No. 4,512,747 (“Hitchens”). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Dependent claims 5, 14 and 45 depend from independent claim 1, discussed above to be patentable over Call. Hitchens fails to cure the above-noted deficiencies of Call in connection with the recitation of claim 1, and thus fails to disclose or suggest every element

of claim 1. Hitchens is instead cited in connection with conveyer type connection elements, animation within the graphical depiction, and alarm generation, rather than the process simulation module as recited in claim 1. While Hitchens discusses simulation of a conveyor system, it is respectfully submitted that Hitchens fails to disclose or suggest a process simulation module adapted to simulate the operation of one or more physical devices being controlled by a control module to which the process simulation module is communicatively connected, as recited in claim 1. Thus, dependent claims 5, 14 and 45 are patentable over the cited references for at least the same reasons as those set forth above in connection with claim 1. Therefore, Applicants respectfully request allowance of dependent claims 5, 14 and 45.

Claims 6-10 and 40-42 stand rejected under 35 U.S.C. §103(a) as unpatentable over Call in view of Harmon et. al. U.S. Pat. No. 5,361,198 ("Harmon"). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Dependent claims 6-10 and 40-42 depend from independent Claim 1, discussed above to be patentable over Call. Harmon fails to cure the above-noted deficiencies of Call in connection with the recitation of claim 1, and thus fails to disclose or suggest every element of claim 1. Harmon is instead cited in connection with the limitations set forth in dependent claims 6-10 and 40-42, rather than the simulation of the operation of a process plant device, and instead discloses a control room. Therefore, Applicants respectfully request allowance of dependent claims 6-10 and 40-42.

Claims 20 and 21 stand rejected under 35 U.S.C. §103(a) as unpatentable over Call in view of Berman et. al. U.S. Pat. No. RE30,280 ("Berman"). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Dependent claims 20 and 21 depend from independent claim 1, discussed above to be patentable over Call. Berman fails to cure the above-noted deficiencies of Call in connection with the recitation of claim 1, and thus fails to disclose or suggest every element of claim 1. Berman is instead cited in connection with the limitations set forth in dependent claims 20 and 21, which involve the control module receiving simulated measurements. Rather than

discuss the simulation of the operation of a process plant device, Berman is directed to methods of building (i.e., constructing) a control center for a plant and, thus, does not disclose or suggest a process simulation module, as recited in claim 1. Therefore, Applicants respectfully request allowance of dependent claims 20 and 21.

IV. Conclusion

Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request reconsideration and allowance of claims 1-45.

The Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP. In addition, if a petition for any further extension of time under 37 CFR 1.136(a) is necessary to maintain the pendency of this case and is not otherwise requested in this case, Applicants request that the Commissioner consider this paper to be a request for an appropriate extension of time and hereby authorize the Commissioner to charge the fee as set forth in 37 CFR 1.17(a) corresponding to the needed extension of time to Deposit Account No. No. 13-2855 of Marshall, Gerstein & Borun LLP. A copy of this paper is enclosed herewith.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicants respectfully request that the Examiner call their attorney at the number listed below.

Dated: January 23, 2006

Respectfully submitted,

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